

REMARKS

In the Office Action, claims 1-13 and 21 were rejected. By this Reply and Amendment, independent claim 21 has been amended and dependent claims 11, 12 and 13 have been amended to incorporate specific additional elements. Claims 14-20 were previously withdrawn, and claims 1-13 and 21 remain pending in the present application. All claim amendments are fully supported throughout the written description and figures of the specification.

In the Office Action, the drawings also were objected to as failing to show every feature specified in the claims. Accordingly, Figure 2 has been amended to show the separate and individual layers of mesh material, now labeled with reference numeral 17. The individual layers are made from fiber strands that create mesh layers, however some of the fibers can be pressed into adjacent layers to interlock the individual layers, as described in paragraphs 0012 and 0013 of the specification and now better illustrated in Figure 2. Figure 2 shows individual fibers of the mesh medium extending from one layer to the next adjacent layer. A replacement sheet has been attached to the present Reply and Amendment.

With respect to the specific drawing objections listed in the Office Action, the individual layers are formed by a mesh of fiber strands rather than being an individual fiber strand. With respect to crosshatching the fiber strands, the illustrated strands are too small to support crosshatching and the strands are not limited to metallic material. With respect to the recitation of a mesh medium covering only a portion of the base pipe, this element is illustrated in Figure 3 which shows the mesh medium covering only a circumferential portion of the base pipe. In fact, this embodiment has been more clearly claimed via the amendments to claims 12 and 13. Accordingly, the objection to the drawings is believed to be overcome.

Claim 12 was rejected under 35 USC 112, second paragraph, as being indefinite. However, dependent claim 12 has been amended substantially, and the specific language objected to by the Examiner has been removed. Accordingly, the rejection under 35 USC 112 is believed to be moot.

Claims 1-8, 10, 12 and 13 were rejected under 35 USC 103(a) as unpatentable over the Whitlock et al. reference, US Patent No.: 6,006,829, in view of the Mutzenberg et al. reference, US Patent No.: 4,250,172. This rejection is respectfully traversed, however amendments have been made to dependent claims 12 and 13, and those claims are believed to be in condition for allowance.

The Whitlock et al. reference discloses a filter for use in subterranean environments. The filter includes an inner support member 10 and a filter body 20. Inner support member 10 is a hollow tubular member that permits fluid flow into its hollow center. (See column 3, lines 38-67). Filter body 20 includes at least one filtering layer 23. The at least one filtering layer 23 is illustrated as three adjacent filtering layers 23. (See column 5, lines 38-67). However, the reference does not disclose or suggest interlocking the layers, and certainly does not suggest interlocking the layers with fibers extending from one layer to another.

The Mutzenberg et al. reference describes a needled fiber mat containing a granular agent for use in processing industries to treat liquid and gaseous substances by contacting them with the solid granular agents. At least one layer of granular sorption agent is disposed between at least two layers of fibrous mat that are interlocked by needling. (See column 1, lines 63-66). In the example provided, a mat has three layers of textile fibers with two layers of granular agent sandwiched in between. Unwoven fibers are transported by needling through the layers of granular agent for interlocking with other layers of textile fibers. (See column 2, lines 20-31).

The Whitlock et al. reference and the Mutzenberg et al. reference do not support the rejection under 35 USC 103(a), because there is no suggestion in either reference that would lead one of ordinary skill in the art at the time of the present invention to combine the dissimilar teachings. The Mutzenberg et al. reference describes needling in conjunction with forming a mat for holding a granular agent. There is no teaching or suggestion in this reference, or the Whitlock et al. reference, to utilize a needling technology in the interlocking of mesh medium layers that are mounted about a base pipe and used as a screen in subterranean wells, as recited in pending independent claim 1. Accordingly, no prima facie case of obviousness has been established, and the rejection should be withdrawn.

Claims 2-8, 10, 12 and 13 ultimately depend from independent claim 1 and also are patentable, because the combination of cited references is improper and no prima facie case of obviousness has been established. However, even if further evidence of a suggestion to combine the references could be provided, the references still fail to disclose numerous elements in the subject dependent claims. For example and without limitation, there is no disclosure or suggestion of:

Claim 3 - fiber strands "arranged in orthogonal layers";

Claim 5 - "in which the mesh medium is a tubular";

Claim 6 - depending from claim 5 and reciting that the tubular is "seamless";

Claim 8 - determining the porosity of the mesh medium "by the thickness of the fiber strands";

Amended claim 12 - a mesh medium that "covers only a circumferential portion of the base pipe, the mesh medium having ends secured directly to the base pipe"; and

Amended claim 13 - a mesh medium that "covers only a circumferential portion of the base pipe".

Claims 9 and 11 were rejected under 35 USC 103(a) as unpatentable over the Whitlock et al. reference in view of the Mutzenberg et al. reference and further in view of the Schulte reference, US Patent No.: 6,237,780. Claims 9 and 11 ultimately depend from independent claim 1 and are patentable because no prima facie case of obviousness has been established with respect to independent claim 1. The Schulte reference provides no further teaching or suggestion for combining the teachings of the Whitlock et al. reference and the Mutzenberg et al. reference. Even if the references could somehow be combined, however, the combination provides no

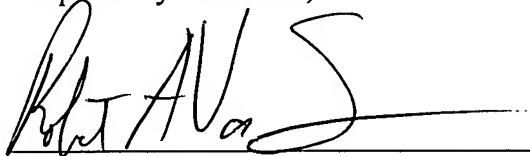
teaching of specific elements in these dependent claims, e.g. "a structure positioned along the base pipe, the mesh medium covering the structure" as recited in amended claim 11.

Claim 21 was rejected under 35 USC 103(a) as unpatentable over the Whitlock et al. reference in view of the Mutzenberg et al. reference and the Bayne et al. reference, US 2002/0007948. This rejection is respectfully traversed, although amendments have been made to independent claim 21 to clarify aspects of the claim language. As discussed above with respect to claim 1, no prima facie case of obviousness has been established, because the requisite suggestion to combine references is missing. However, even if further evidence of the requisite suggestion to combine were to be found, the combination of these three references still fails to disclose elements of pending claim 21.

The Bayne et al. reference describes a well system having auxiliary conduits that can be used in gravel packing applications. The conduits 212 can be disposed between a shroud assembly 200 and gravel pack screens 214. (See paragraph 0031). Additionally, the conduits 212 can include a fiber optic cable within or outside of the conduit. (See paragraph 0032). However, the reference does not disclose a mesh medium. The Bayne et al. reference completely fails to describe or suggest a mesh screen apparatus comprising "a piece of equipment having at least one intelligent completion device which the mesh medium at least partially encloses" as recited in amended, independent claim 21. In fact, none of the references discloses or suggest at least partially enclosing an intelligent completion device to prevent infiltration of particulates into the equipment. Accordingly, the rejection of claim 21 should be withdrawn.

In view of the foregoing remarks, the pending claims are believed patentable over the cited references. However, if the Examiner believes certain amendments are necessary to clarify the present claims or if the Examiner wishes to resolve other issues by way of a telephone conference, the Examiner is kindly invited to contact the undersigned attorney at the telephone number indicated below.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Robert A. Van Someren', written over a horizontal line.

Robert A. Van Someren
Reg. No. 36,038

Date: February 3, 2006

PO Box 2107
Cypress, TX 77410-2107
Voice: (281) 373-4369

IN THE DRAWINGS

The attached sheet of drawings includes changes to Figure 2. This sheet, which includes Figures 1-4, replaces the original sheet including Figures 1-4. In Figure 2, reference numeral 17 has been added, and the illustration of the mesh medium has been adjusted to show a plurality of layers, as discussed in paragraphs 0012, 0013 and throughout the specification.

Attachment: Replacement Sheet